

UNIVERSITI TEKNOLOGI MARA

**HUMAN BEHAVIOUR:
ELECTRICITY CONSUMPTION OF
MULTI-STOREY RESIDENTIAL
BUILDINGS IN SHAH ALAM AND
KUALA LUMPUR**

NEHZAT JALALKAMALI

**Thesis submitted in fulfillment
of the requirements for the degree of
Master of Science**

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AUTHOR'S DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Teknologi MARA. It is original and it is the result of my own work, unless otherwise indicated or acknowledged as referenced work. This thesis has not been submitted to any other academic institution or non-academic institution for any degree of qualification.

I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi MARA, regarding the conduct of my study and research.

Name of Student : Nehzat Jalalkamali

Student I.D. No. : 2011454282

Programme : Master of Science

Faculty : Faculty of Architecture, Planning and Surveying

Title : Human Behaviour: Electricity Consumption of Multi-Storey Residential Buildings in Shah Alam and Kuala-Lumpur

Signature of Student :



Date : March 2014

ABSTRACT

In the past years, the energy crisis has become more and more serious and needs to be paid more attention to accordingly. Residential sector building energy consumption uses a large portion of the Total National Energy Consumption (TNEC) all over the world. Energy consumption in residential buildings is dependent on building characteristics and occupants' behaviour. To investigate the interaction between human behavior and the related electricity consumption, a quantitative research was conducted on a sample of 117 residents of three condominiums in The Klang Valley. The socio-demographic factors towards electricity consumption and the effect of awareness on electricity consumption were then investigated by statistical analysis. The analysis revealed that out of seven introduced independent variables (age, race, gender, monthly income, Education, Number of people staying at home and Type of Tenure), only income and number of people living in the house could significantly and positively contribute to electricity consumption. A model was suggested according to the regression analysis of the results. It was also shown that unlike the previous studies, there was no significance relationship between the type of tenure and electricity consumption. Finally the positive effect of electricity awareness on electricity consumption is shown by the results. The comparison between the multi-storey local residents' patterns and styles of living and their relative electricity consumption with the overseas' people might enlighten many views towards sustainable behavioural living.

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